

**We Claim:**

- 5           1.     A ventilated support structure for a vehicle, comprising:
- (a) a seat surface; the seat surface having a front and a rear;
- (b) the seat surface having a lower portion and an upper portion; the lower  
portion encompassing the front of the seat surface; the upper portion  
encompassing the rear of the seat surface.
- 10           (c) a slot positioned on top of the seat surface; the slot extends along the seat  
surface and over at least part of the upper portion of the seat surface; at least  
one opening being disposed within the slot;
- (d) channel having a first portion and a second portion;
- (e) the first portion of the channel having an air-intake component for  
15           directing air flow into the channel; the air in-take component having at least  
one aperture;
- (f) the second portion of the channel being engaged with the least one  
opening so that air can flow through the least one aperture of the air intake  
component and through the least one opening disposed within the slot to  
20           ventilate the seat surface.
2.     The ventilated support structure of claim 1, wherein the seat surface is supported on  
a rigid frame.
3.     The ventilated support structure of claim 2, wherein the channel is attached to the  
25           rigid frame member.

4. The ventilated support structure of claim 1, wherein the seat surface has a plurality of openings disposed within the slot.

5. The ventilated support structure of claim 4, wherein the dimensions of the openings differ from one to another.

5 6. The ventilated support structure of claim 1, wherein the second portion of the air distribution channel is connected to more than one opening.

7. The ventilated support structure of claim 5, wherein the plurality of openings are positioned in different areas of the seat surface; the channel is engaged with the plurality of openings to enable air to flow through the plurality of openings.

10 8. The ventilated support structure of claim 1, wherein the channel extends essentially over the entire length of the support structure.

9. The ventilated support structure of claim 1, wherein the air distribution channel comprises a water discharge component for evacuating water entering into the air-intake component.

15 10. The ventilated support structure of claim 2, wherein the channel is inside the rigid frame.

11. The ventilated support structure of claim 1, wherein the air-intake component comprises a plurality of apertures.

12. The ventilated support structure of claim 2, wherein the channel is integrally formed with the rigid frame.

13. The ventilated support structure of claim 5, wherein said support structure comprises at least one secondary conduit connecting the channel to at least one opening.

14. The ventilated support structure of claim 1, wherein the at least one opening is located in the upper portion of the seat surface.

15. The ventilated support structure of claim 1, further comprising a longitudinal center plane extending through the lower portion of the seat surface to the upper portion of the seat surface to the upper portion thereof, thus defining two substantially symmetrical halves of the seat surface.

16. The ventilated support structure of claim 1, wherein the channel is positioned beneath the seat surface.

17. A bicycle saddle comprising:

- (i) a slot in an upper side of the bicycle saddle; at least one opening disposed within the slot;
- (ii) an air-intake component positioned in front of the bicycle saddle;
- (iii) a channel that communicates the air intake component with the at least one opening of the slot so that air can flow through the opening to ventilate the upper side of the bicycle saddle.

18. The bicycle saddle of claim 1, wherein the seat surface is supported on a rigid frame.

19. The bicycle saddle of claim 1, wherein the seat surface has a plurality of openings disposed within the slot.

20. The ventilated support structure of claim 1, wherein the air distribution channel comprises a water discharge component for evacuating water entering into the air-intake component.